

Notice of Allowability**Application No.**

10/527,831

Applicant(s)

NORTH, KATHRYN NANCE

Examiner

STEVEN C. POHNERT

Art Unit

1634

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 3/20/2009.
2. ☒ The allowed claim(s) is/are 1, 5, 12-15, 18, 24-25, 29, 33, 34, 42-43.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
(a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
(b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date 3/24/2009.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

/Sarae Bausch/
Primary Examiner, Art Unit 1634

EXAMINER'S AMENDMENT

EXAMINER'S AMENDMENT

1. An extension of time under 37 CFR 1.136(a) is required in order to make an examiner's amendment which places this application in condition for allowance. During a telephone conversation conducted on 3/24/2009, Robert Travers requested an extension of time for 1 MONTH(S) and authorized the Director to charge Deposit Account No. 19-1970 the required fee of \$65.00 for this extension and authorized the following examiner's amendment. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.
2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Robert Travers on 3/24/2009.

The application has been amended as follows:

The claims:

Claim 1. A method to predict potential sprinting, strength, or power performance in a human comprising:

- a) analyzing a sample obtained from the human for the presence of one or more genetic variations in α -actinin-3 (ACTN3) gene;
- b) detecting the presence of two 577R alleles at the loci encoding amino acid number 577 of the α -actinin-3 (ACTN3) protein; and
- c) predicting the potential sprinting, strength, or power performance of the human, wherein the presence of two copies of the 577R allele is positively associated with potential sprinting, strength, or power performance.

Claim 16. (canceled)

Claim 25. A method of selecting a training program based on potential sprinting, strength, or power performance for a human comprising:

- a) analyzing a sample obtained from the human for the presence of one or more genetic variations in α -actinin-3 (ACTN3) gene;
- b) detecting the presence of two 577R alleles at the loci encoding amino acid number 577 of the α -actinin-3 (ACTN3) protein;
- c) predicting the potential sprinting, strength, or power performance of the human, wherein the presence of two 577R alleles is positively associated with potential sprinting, strength, or power performance, and
- d) selecting a training program based on predicting potential sprinting, strength and power performance of step c).

Claim 29. A method of selecting a sprint/power sport or event based on potential sprinting strength and power performance for a human comprising:

- a) analyzing a sample obtained from the human for the presence of one or more genetic variations in α -actinin-3 (ACTN3) gene;
- b) detecting the presence of two 577R allele at the loci encoding amino acid number 577 of the α -actinin-3 (ACTN3) protein;
- c) predicting the potential sprinting, strength, or power performance of the human, wherein the presence of two 577R alleles is positively associated with potential sprinting, strength, or power performance, and
- d) selecting a sprint/power sport or event based on predicting potential sprinting, strength and power performance of step c).

3. The following is an examiner's statement of reasons for allowance: The Prior art of record recognized the 577R and 577X allele of the human α -actinin-3 gene (Millis et al (Human Molecular Genetics (2001)). However, the prior art of record does not teach or suggest the detection of the homozygous 577R allele as an indicator of potential sprinting, strength or power performance.

4. The examiner's amendment has overcome the enablement rejection of record.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably

accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEVEN C. POHNERT whose telephone number is (571)272-3803. The examiner can normally be reached on Monday-Friday 6:30-4:00, every second Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ram Shukla can be reached on 571-272-0735. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Steven Pohnert

/Sarae Bausch/
Primary Examiner, AU 1634